

# Work Order ID 71139

Thursday, June 23, 2011 12:32:01 PM

Page 1

Item ID: D3195-043

Accept

Setup Start

Revision ID:

Stop

Item Name: Bracket Assembly

Start Date: 6/23/2011 Start Qty: 4.00

Cust Item ID:

Required Date: 7/11/2011 Req'd Qty: 4.00

Customer:

Reference:

Approvals:

Process Plan:

MF

Date: 11-06-23

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

Stop

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D3195

Rev A

100

0.00



BAND SAW

Bandsaw

Memo

0.00

Jeaspa Bandsaw

Cut blanks: (1.250" x 1.500") x 3.60" long

on 11/06/24

5

110

0.00



HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.00

HAAS CNC vertical machine #1

1-Machine D3195-3 as per Folio FA334 and Dwg D3195-3  
312-Debur

on 11/06/27

5

120

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo



0.00

Quality Control

on 11/06/27

5

Dart Aerospace Ltd

W/O: 71139		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
11.06.28	170	OK to use 3M 1300L INSTEAD OF EPOXY	SB	11/06/28	5	 11.06.28 DS/042	 11/06/28

Part No: D3195-043    PAR #: \_\_\_\_\_    Fault Category: \_\_\_\_\_    NCR: Yes No    DQA: \_\_\_\_\_    Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_    Disposition: \_\_\_\_\_    QA: N/C Closed: \_\_\_\_\_    Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action    Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

# Work Order ID 71139

Thursday, June 23, 2011 12:32:01 PM



Page 2

Item ID: D3195-043

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Setup Start



Revision ID:

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Item Name: Bracket Assembly

Start Date: 6/23/2011 Start Qty: 4.00



Cust Item ID:

Required Date: 7/11/2011 Req'd Qty: 4.00

Customer:

Reference:

Run Start



Approvals: Process Plan: Date: Tooling: Date:

Stop



QC: Date: SPC (Y/N): Date:

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

130 QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

5.2 11/06/27

5

0

140 Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

5 11-6-27

150 Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3

0.00



Powdercoat

Memo

0.00

Powder Coating

START TIME:

FINISH TIME:

OVEN TEMPERATURE:

8-30

3200

9-00

5x 0 M-1 11/06/28

M115128

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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# Work Order ID 71139

Thursday, June 23, 2011 12:32:01 PM

Page 3

Item ID: D3195-043

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Item Name: Bracket Assembly

Start Date: 6/23/2011 Start Qty: 4.00

Cust Item ID:

Required Date: 7/11/2011 Req'd Qty: 4.00

Customer:

Reference:

Run Start

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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160

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

5 0 11-6-28

170

Small Fab

0.00



Small Fab

Memo

0.00

Small Fab

1-Lightly Sand bonding surface 2-Bond D3195-7 into D3195-13as per Dwg  
D3195 A/R Contact Cement

1300C

V1 117750

SB 11/06/29

5

PTU 12/28

180

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

8/10/29

75

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 71139

Thursday, June 23, 2011 12:32:01 PM



Page 4

Item ID: D3195-043

Accept



Setup Start



Revision ID:

Stop



Item Name: Bracket Assembly

Start Date: 6/23/2011 Start Qty: 4.00



Cust Item ID:

Required Date: 7/11/2011 Req'd Qty: 4.00



Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

190

Identify as per dwg & Stock Location: 51246A

0.00



Packaging

Memo

0.00

Packaging

*CU JB (5) 11/06/29*

200

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

*11/06/29*  
*CMF 11-06-2*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

Thursday, June 23, 2011 12:31:59 PM

Page 1

Work Order ID: 71139

Parent Item: D3195-043

Parent Item Name: Bracket Assembly



Start Date: 6/23/2011

Required Date: 7/11/2011

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP Rev:A New Issue 05-11-08 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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D3195-7		Manufactured	No			100	Each	9.0000	1	4			
Pad													

Location	Loc Qty	Loc Code
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GA	9	
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69385	9	
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M6061T6B1.500X01.25		Purchased	No			170	f	22.4278	0.3	1.263158			
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6061-T6 Bar 1.50 x 1.25

Location	Loc Qty	Loc Code
----------	---------	----------

MAT004	22.4278	
--------	---------	--

→ 110936	10.4278	
----------	---------	--

118071	12	
--------	----	--

1.60 *OK 11/06/24*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

<b>DART AEROSPACE LTD</b>		<b>Work Order:</b>	71139
<b>Description:</b> Bracket		<b>Part Number:</b>	D3195-3
<b>Inspection Dwg:</b> D3195	<b>Rev:</b> A	<b>Page 1 of 1</b>	

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article
 ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
3.432	+/-0.010	3.433	—		Vern	ML-7
1.265	+/-0.010	1.261	—		"	"
R0.37	+/-0.030	R.370	—		R-G	
Ø0.277	+0.005/-0.000	Ø.278	—		Vern	ML-7
2.677	+/-0.005	2.677	—		"	"
0.242	+/-0.010	.244	—		"	"
0.377	+/-0.010	.378	—		"	"
0.500	+/-0.010	.499	—		"	"
R0.188	+/-0.010	R.188	—		R-G	
0.250	+/-0.010	.247	—		Vern	ML-7
0.882	+/-0.010	.883	—		"	"
1.250	+/-0.010	1.248	—		"	"
0.500	+/-0.010	.500	—		"	"
Ø0.191	+0.005/-0.000	Ø.192	—		"	"
1.000	+/-0.010	1.001	—		"	"

<b>Measured by:</b>	amf	<b>Audited by:</b>	B.A	<b>Prototype Approval:</b>	N/A
<b>Date:</b>	11/06/27	<b>Date:</b>	11/06/27	<b>Date:</b>	N/A

Rev	Date	Change	Revised by	Approved
A	04.04.20	New Issue (P/O D412-702-011/-013)	KJ/RF	
B	05.04.26	R0.37 was R0.037; 1.084 removed	KJ/JLM	





W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

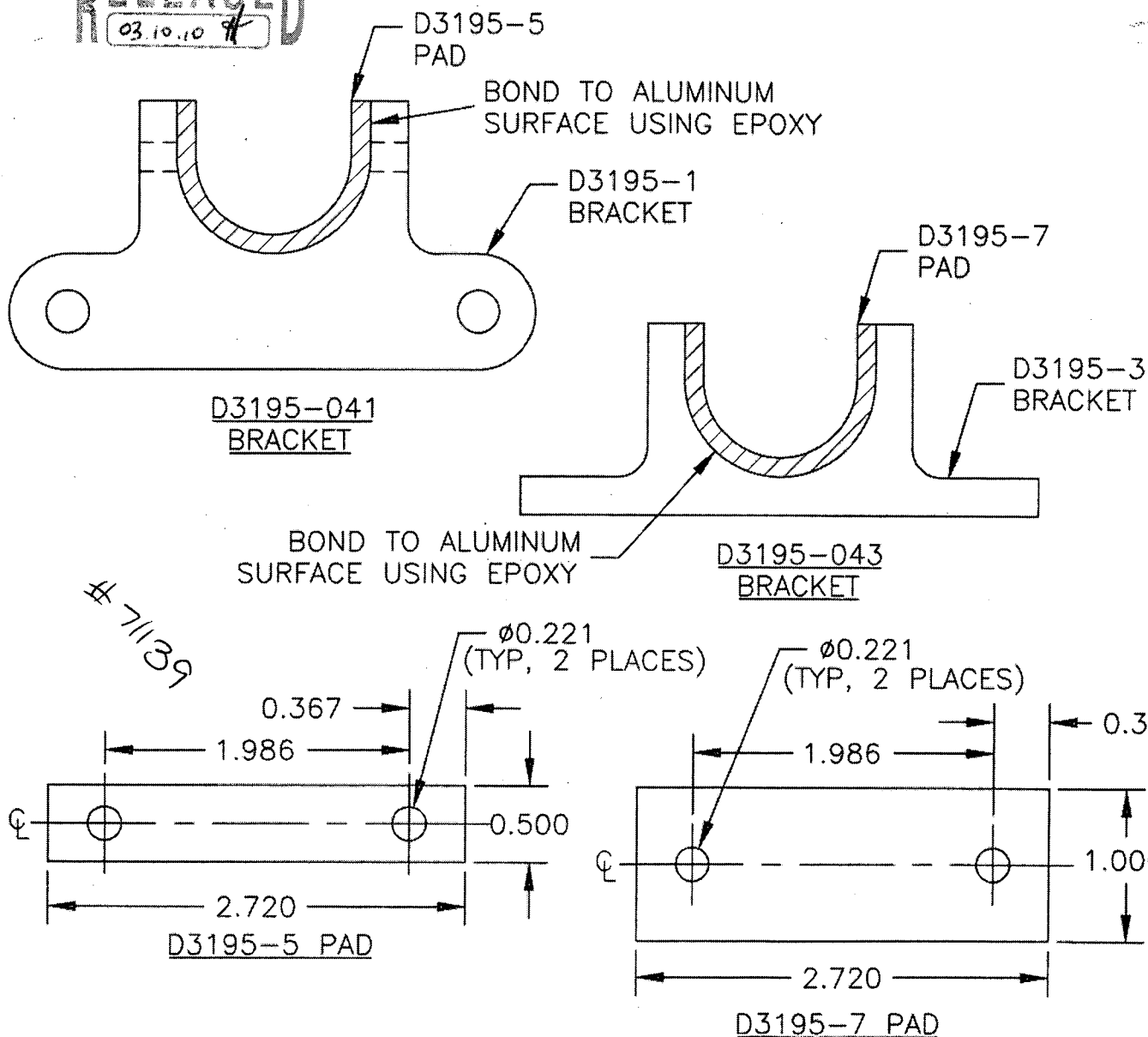
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN 		DRAWN BY 		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED 		APPROVED 		DRAWING NO. D3195	REV. A SHEET 1 OF 3
DATE 03.06.23				TITLE BRACKET	SCALE 1:1
A	03.06.23		NEW ISSUE		

RELEASED  
03.10.10 #



D3195-5 & D3195-7 PAD

- 1) MATERIAL: 60 DUROMETER NEOPRENE 1/8" THICK  
(POSSIBLE SUPPLIERS, ACCURATE RUBBER)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 3) ALL DIMENSIONS ARE IN INCHES

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

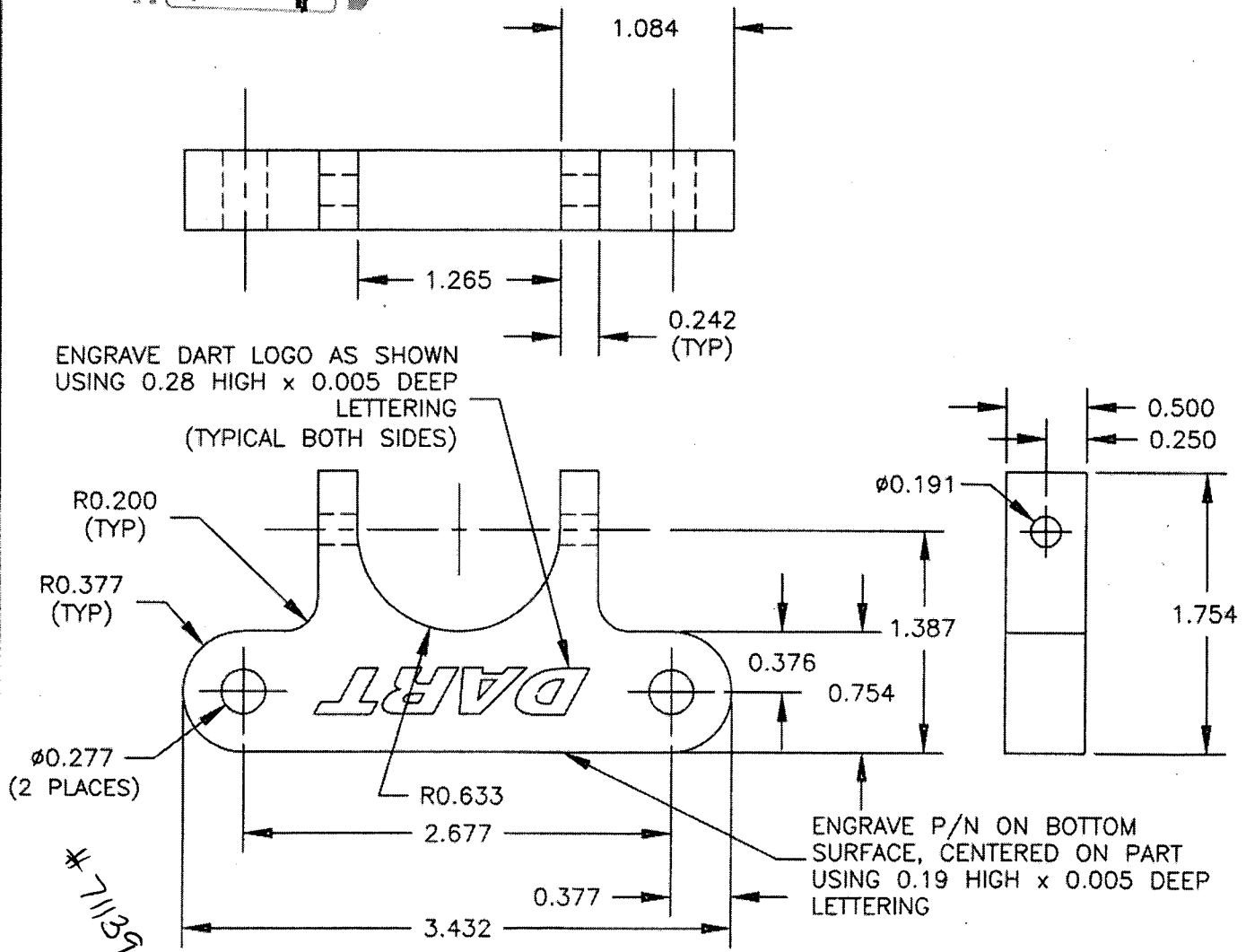
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN CP	DRAWN BY CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D3195	REV. A SHEET 2 OF 3
DATE 03.06.23		TITLE BRACKET	SCALE 1:1

RELEASED  
03.10.10 #



**D3195-1 BRACKET**

- 1) MATERIAL: 6061-T6/T651 (QQ-A-250/11 OR QQ-A-200/8 OR QQ-A-225/8)  
(REF. DART SPEC M6061T6S OR M6061T6B)
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 3) FINISH: POWDER COAT GREY SANDTEX (4.3.5.6) PER DART QSI 005 4.3
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

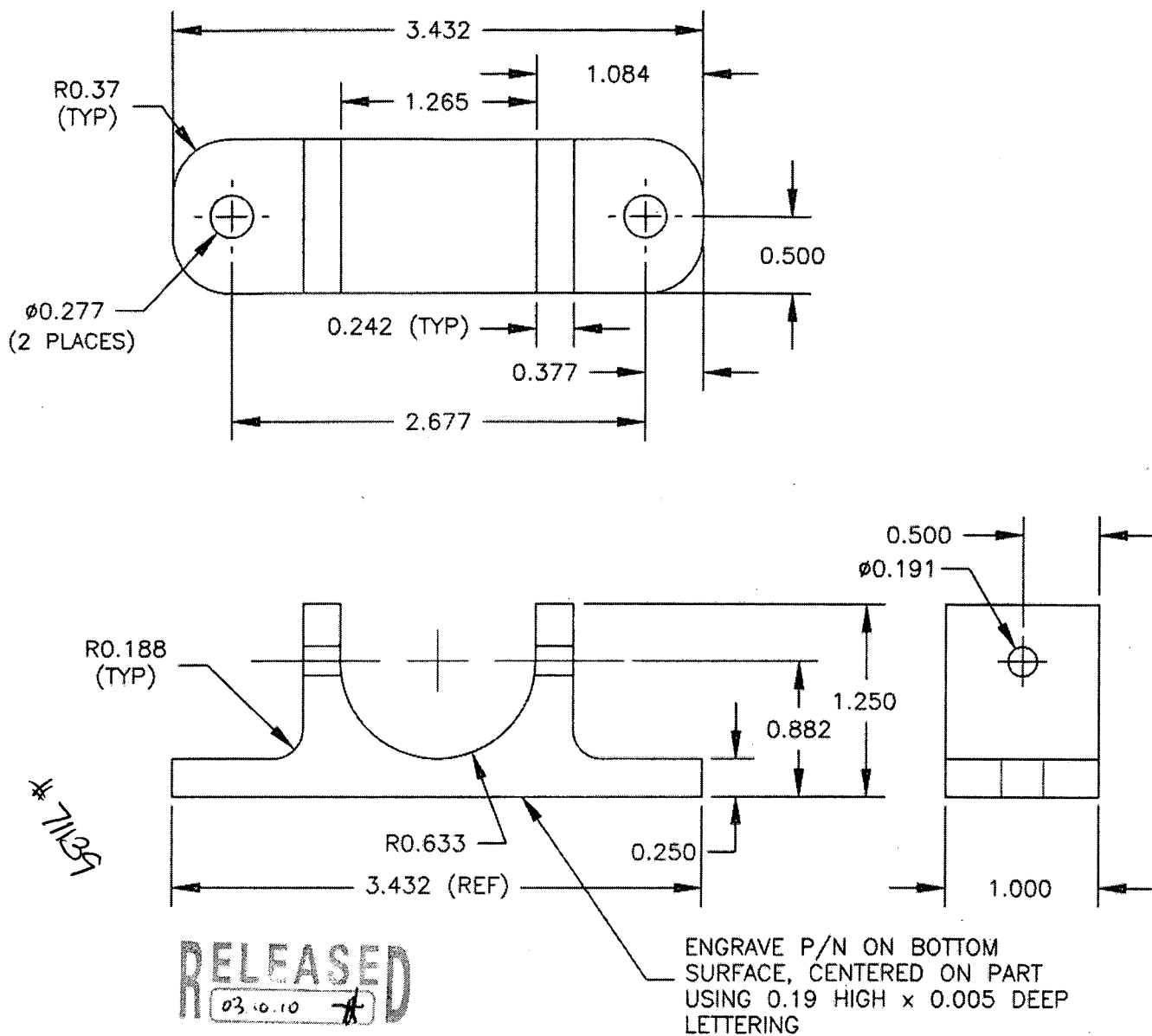
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries





DESIGN CP	DRAWN BY CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D3195	REV. A SHEET 3 OF 3
DATE 03.06.23		TITLE BRACKET	SCALE 1:1



**D3195-3 BRACKET**

- 1) MATERIAL: 6061-T6/T651 (QQ-A-250/11 OR QQ-A-200/8 OR QQ-A-225/8)  
(REF. DART SPEC M6061T6S OR M6061T6B)
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 3) FINISH: POWDER COAT GREY SANDTEX (4.3.5.6) PER DART QSI 005 4.3
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

**Part No:** \_\_\_\_\_ **PAR #:** \_\_\_\_\_ **Fault Category:** \_\_\_\_\_ **NCR: Yes No** **DQA:** \_\_\_\_\_ **Date:** \_\_\_\_\_  
**Resolution:** \_\_\_\_\_ **Disposition:** \_\_\_\_\_ **QA: N/C Closed:** \_\_\_\_\_ **Date:** \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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